I-1
5/12/97

Ohio EPA - DERR/DHWM
Sampling Plan
for
Jefferson Processing/Argo Sales, f.k.a.
Satralloy/Satra Concentrates

SITE NAME: Satralloy/Satra Concentrates/Argo Sales/Jefferson Processing

ADDRESS: County Road 74 (Goulds Rd)
Cross Creek Township 43952

OHIO EPA ID#: 441-1068
USEPA ID#: OHD010467538

COUNTY: Jefferson

OHIO EPA DISTRICT: SEDO

PROPOSED SAMPLING DATE: May 12, 1997.

DIRECTIONS TO SITE: Travel east on I-70 to S.R. 7. Follow S.R. 7 north to Mingo Junction. Exit S.R. 7 at Commercial Avenue exit (Wheeling-Pitt exit). Travel north on Commercial Avenue. Road will make a "U-turn", passing under railroad tracks. Travel south on Clinton Avenue through Mingo Junction and under S.R. 7. Clinton Avenue turns into County Road 74 (Gould Road). Travel west on County Road 74 to site.

GROUNDS WARRANTING SAMPLING EVENT: This site is a former ferrochromium production facility. The site consists of approximately 320 acres, two main furnace buildings, and several smaller support structures (i.e. cooling towers, pump building, wwtp, lab). The facility was constructed in 1958. Production of ferroalloys ceased in 1982, after which chrome alloy was reclaimed from slags stored in piles on-site. Approximately 700,000 tons of low-carbon slag, 100,000 tons of high-carbon slag, and 3,500 tons of baghouse dust (baghouses were installed in 1979) were generated and stored at the site from 1958-1982. In addition, several smaller piles of scrap material and refuse exist at the site. A portion of the on-site wastes are currently being managed, moved, and disposed of by the current site operator. These wastes have not been evaluated for hazardous determination.

The site has outstanding surface water, solid waste, air and possibly hazardous waste violations. Previous USEPA sampling has disclosed the presence of heavy metals (principly chromium) and PAHs in several of the baghouse dust and slag piles. In addition, DSW sampling and permit

compliance sampling has shown the presence of chromium (including high levels of hexachrome) in Cross Creek sediments and surface water discharges.

Previous visits to the facility have disclosed several worker and recreational exposure scenarios, including excavation worker, fishing in Cross Creek, and trespasser (motorcycle riding through waste piles). Previous sampling has demonstrated that metal contaminants are leaching into storm water runoff and into Cross Creek. The potential also exists for direct exposure to waste piles, and groundwater contamination due to leaching from waste piles.

Due to the large areal extent of the property (approx. 320 acres), exposed waste piles, and contaminant discharges into Cross Creek, ecological exposure to contaminants is likely.

GOALS: The purpose of the sampling event is to characterize the nature of the entire site property, including all waste piles; conduct materials sampling for characterization under Ohio's laws and regulations (solid waste and hazardous waste), and conduct sampling to evaluate potential risks to human health and the environment.

PROPOSED SAMPLING - DERR:

1. The event will consist of simultaneous reconnaissance and materials sampling. The site reconnaissance will consist of a complete site walkover; characterization, photographing, and mapping of waste piles and other site features; and evaluation of surface water drainage patterns. The reconnaissance will occur in two phases: Phase I will consist of the characterization of the southern portion of the property between Gould Road and the northern ridge, including the mill buildings. Phase II will consist of the characterization of the northern ridge and associated waste piles. The anticipated reconnaissance path for both Phase I and II will occur as outlined in Figure 4. Sampling will occur during the reconnaissance. All reconnaissance and sampling activities conducted during the event will be marked in the field log book.

2. Proposed sampling locations: In general, six media categories exist at the site:

    1) lime/slag piles across the site;
    2) baghouse dust piles across the site;
    3) misc. piles (solid waste and/or visual abnormalities);
    4) material/piles inside buildings;
    5) surface water;
    6) sediment/soil drainage ditches.

    Samples will be obtained from "hot spots" (i.e. those areas, which due to file review information, previous sampling, visual observation and/or field screening indicate contamination). Investigation efforts will focus primarily on determining whether "source" areas exist at the site. Anticipated sample location areas are marked on Figures 5, 6, & 7.

The anticipated areas were derived from maps and photographs; therefore, actual sample locations may be different due to changing or unexpected site conditions.

3. Proposed number of samples: 35

Lime/Slag Piles:	10	Total/TCLP Metals*
Baghouse Dust Piles:	5	Total/TCLP Metals, SVOCs
Misc. Piles:	5	Total/TCLP Metals, VOCs, SVOCs
Inside Building:	5	Total/TCLP Metals
Sediment/Soil Drainage:	(5)**	Total/TCLP Metals
Surface Water:	(5)**	Total Metals, Hexavalent Chromium
Total:	35	

* Metal parameters will include: RCRA Metals (As, Ba, Cd, Cr, Pb, Hg, Se, Ag), Cu, Ni, and V

** Sediment/Soil Drainage and Surface Water samples are not anticipated, and will be contingent on site conditions encountered.

4. Sampling procedures (list FSOPs):

Site Entry:	1.01 Initial Site Entry
Field Data:	2.01 Logbook
	2.03 Photograph Documentation
Chain of Custody:	3.01 Chain of Custody
Surface Water:	4.01 Sample Collection Technique for Surface Water Sampling
	4.02 Bottle Immersion
Soils:	7.01 Sample Collection Technique for Soil Sampling
	7.02 Surface Soil Sampling by Spoon or Scoop
	7.04 Soil Sampling with Coring Tubes and Hammer Attachment
Sediment:	9.01 Sample Collection Technique for Sediment Sampling
	9.04 Hand Sediment Corer
Air Surveillance:	13.03 Photovac Microtip PID, Model MP100

5. Laboratory analytical methods: See Tables 1-3

PROPOSED SAMPLING - DHWM:

1. The site map of sample locations will be prepared on-site.

2. Samples taken will be a mixture of composite and grab samples to be determined on-site and documented in field notes.

3. Only solid samples will be collected from waste piles/areas currently being managed.

4. Sampling Procedures (list SOPs):

Sampling:	SOP-106:	Pile sampling-single source
	SOP-121:	Grid samples
	SOP-122:	Pile sampling-multi source
Field monitoring:	SOP-125:	Photoionization detector
	SOP-127:	CGI
Documentation:	SOP-116:	Chain of custody
	SOP-124:	Sample labels and COC Seals
	SOP-132:	Documentation
		Site sampling plan
		Site notes
		Site map
		Photo documentation

5. Proposed number of samples: 30 (TCLP metals analysis) + 3 duplicates

6. Decontamination Procedures: None (all sampling equipment used will be disposable)*.

   * Equipment blanks (2) will be obtained from disposable pans used for mixing/compositing.

SITE CONTACT AND PHONE NUMBER: Catherine Glorious
NON- RESPONSIVE

Gary Smith
NON- RESPONSIVE

Grant Wilkinson, Esquire
(Attorney for Jefferson Processing)
Phone: NON- RESPONSIVE

STAFF ASSIGNMENTS: See Site Safety Plan

ATTACHMENTS:

FIGURES

Figure 1: Area Map (Topo Map)
Figure 2: Mingo Junction Street Map
Figure 3: Property Boundary Map
Figure 4: Anticipated Reconnaissance Path (DERR)
Figure 5: Anticipated Sample Location Areas (DERR)
Figure 6: Anticipated Sample Location Areas (DERR, continued)
Figure 7: Anticipated Sample Location Areas (DERR, continued)

TABLES

Table 1: DERR Field Sampling Summary (Non-aqueous Samples)
Table 2: DERR Field Sampling Summary (Aqueous Samples)
Table 3: DERR Field Sampling Summary (Quality Control Samples)

OTHER ATTACHMENTS

Site Safety Plan

TABLE 1

DERR FIELD SAMPLING SUMMARY: SOIL/SOLID SAMPLES

PARAMETER	Parameter 1 VOCs	Parameter 2 SEMI-VOLS	Parameter 3 TOTAL/TCLP METALS
METHOD REFERENCE	SW 8240	SW 8270	SW 6010/7000 Series SW 1311 (TCLP)
MATRIX	Non-aqueous	Non-aqueous	Non-aqueous
# CONTAINERS TYPE, AND VOLUME REQUIRED	4 oz. glass	16 oz. glass*	16 oz. glass*
PRESERVED	4 degrees C	4 degrees C	4 degrees C
HOLDING TIME	14 days	14 days	6 months (Hg - 28 days)
# SAMPLES	5	10	25-30

* One 16 oz. glass jar will be utilized for Total and TCLP Metals, and SVOCs.

TABLE 2

DERR FIELD SAMPLING SUMMARY: AQUEOUS SAMPLES

PARAMETER	Parameter 1 TOTAL METALS
METHOD REFERENCE	SW 6010/7000 Series
MATRIX	Aqueous
# CONTAINERS TYPE, AND VOLUME REQUIRED	1 Liter Plastic
PRESERVED	NO_3* 4 degrees C
HOLDING TIME	6 months (Hg - 28 days)
# SAMPLES	5

* Due to anticipated high pH, may need to add multiple NO_3 ampules. Monitor pH in field.

TABLE 3

DERR FIELD SAMPLING SUMMARY: QUALITY CONTROL SAMPLES

SUB-TOTAL	1)VOCs:	2)SVOCs:	3)METALS:
DUPLICATES	1 Soil/Solid*	1 Soil/Solid	3 Soil/Solid 1 Aqueous*
EQUIPMENT BLANKS	**	**	**
TRIP BLANKS			
COMPARISON SAMPLES			
BACKGROUND SAMPLES			
MATRIX SPIKE			
METHOD REFERENCE	See Env. Sample Reference	See Env. Sample Reference	See Env. Sample Reference
REGULATORY LIMIT			
TOTAL # SAMPLES	1 Soil/Solid*	1 Soil/Solid	3 Soil/Solid 1 Aqueous*

* Quality Control Samples for these parameters/media are only required if field samples are collected.

** Equipment blank (2-5) will be obtained from disposable pans used for mixing.

SIGNATURES DATE

SUBMITTED BY:

PROJECT LEADER/
SITE COORDINATOR: _____

REVIEWED BY:

SIFU/D.O.
MANAGEMENT: _____


Creek
PENN CENTRAL
Oil Wells
Gould
ROAD
Kolmont
Valley
Long Run
Sch
BM
708
Creek
New Alexandria
BRILLIANT

Figure 1

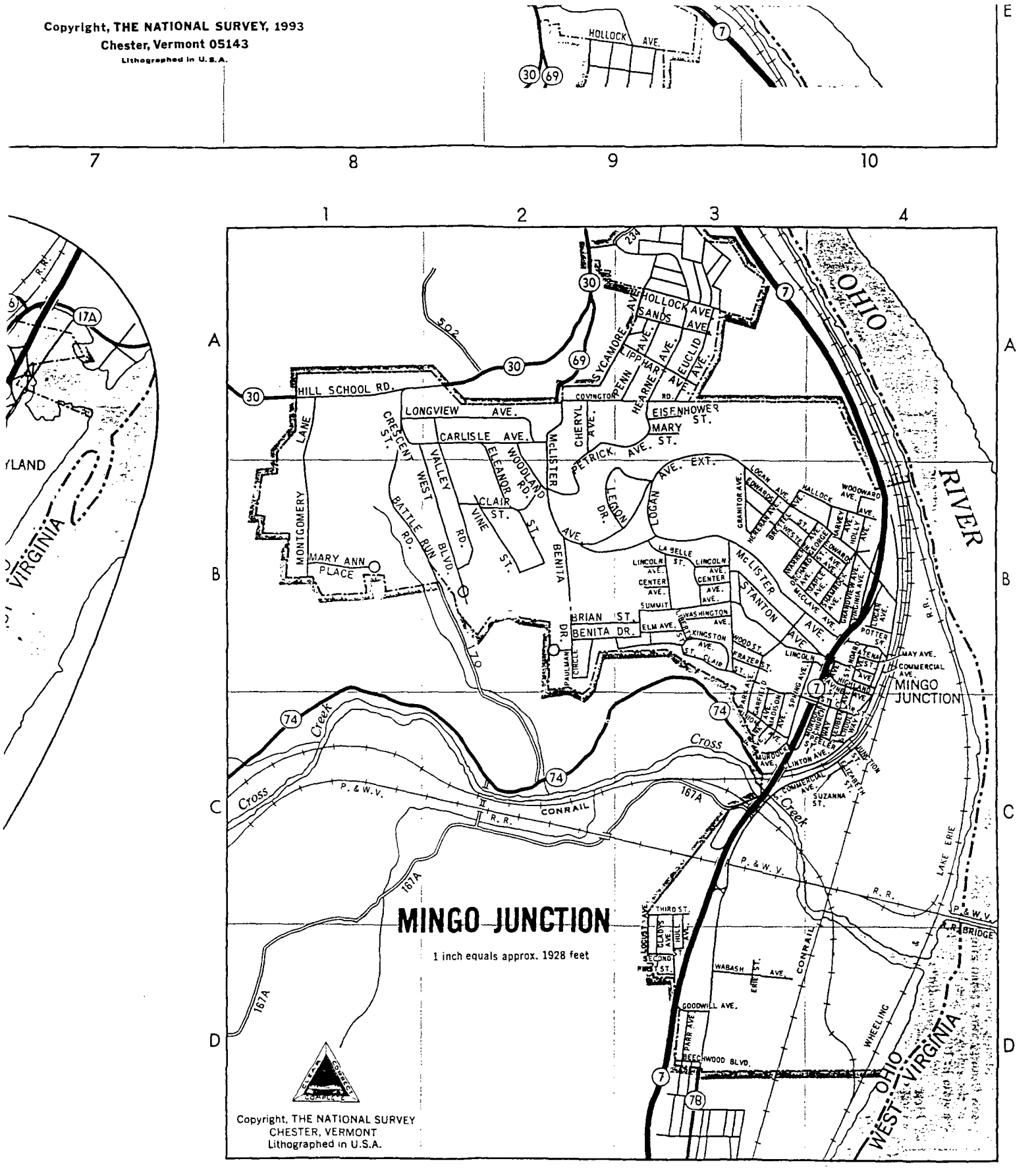


Figure 2

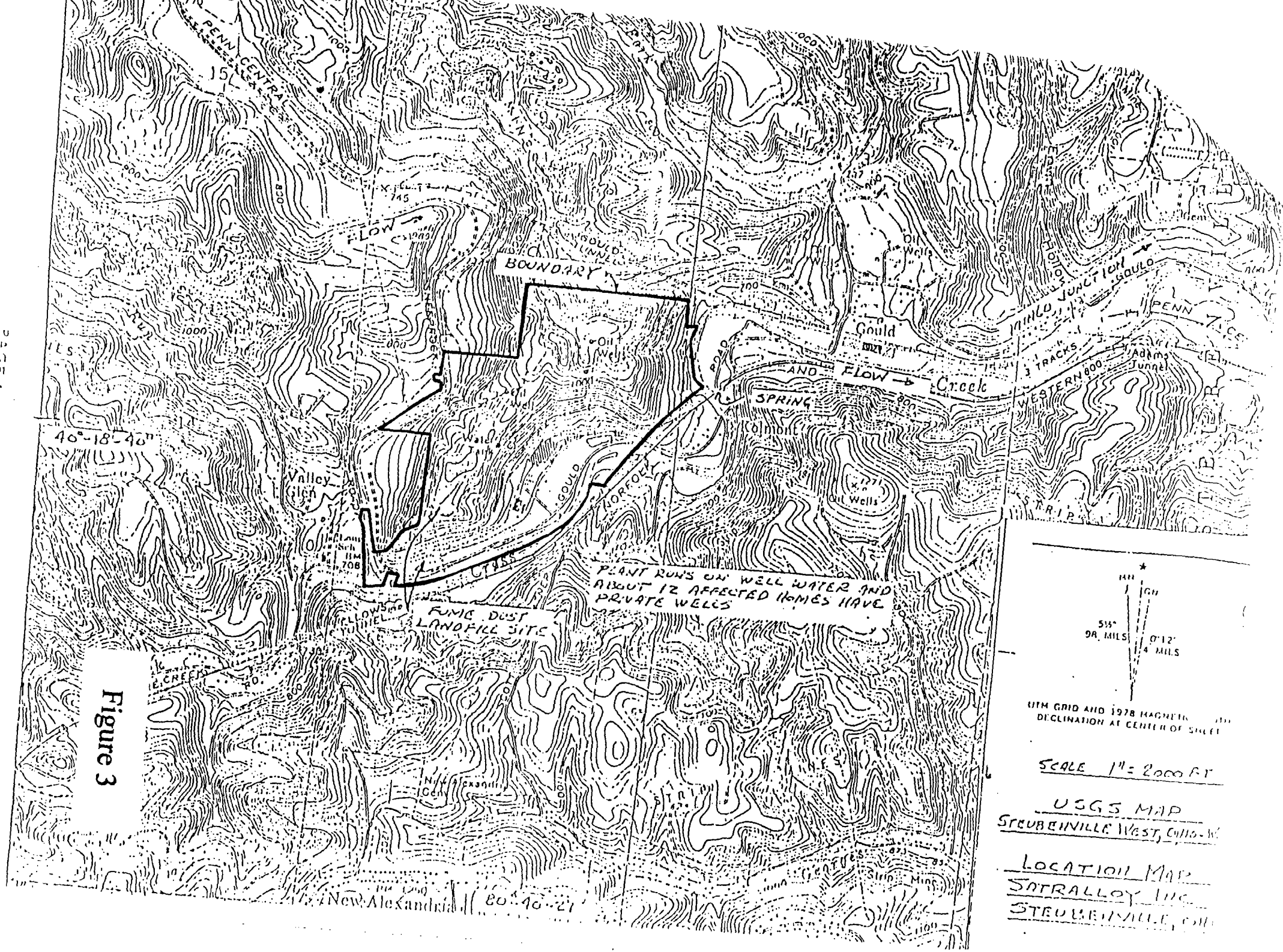

BOUNDARY
FLOW
Gould
Creek
AND FLOW
SPRING
Colmore
Valley
Wells
PLANT RUNS ON WELL WATER AND
ABOUT 12 AFFECTED HOMES HAVE
PRIVATE WELLS
FUME DUST
LANDFILL SITE
40°-18'-40"
80°-40'-22"
New Alexandria
PENN CENTRAL
WESTERN
Adams
Tunnel
3 TRACKS
STRIP
UTM GRID AND 1978 MAGNETIC
DECLINATION AT CENTER OF SHEET
SCALE 1" = 2000 FT
USGS MAP
STEUBENVILLE WEST, OHIO-WV
LOCATION MAP
SATRALLOY INC.
STEUBENVILLE, OHIO

Figure 3

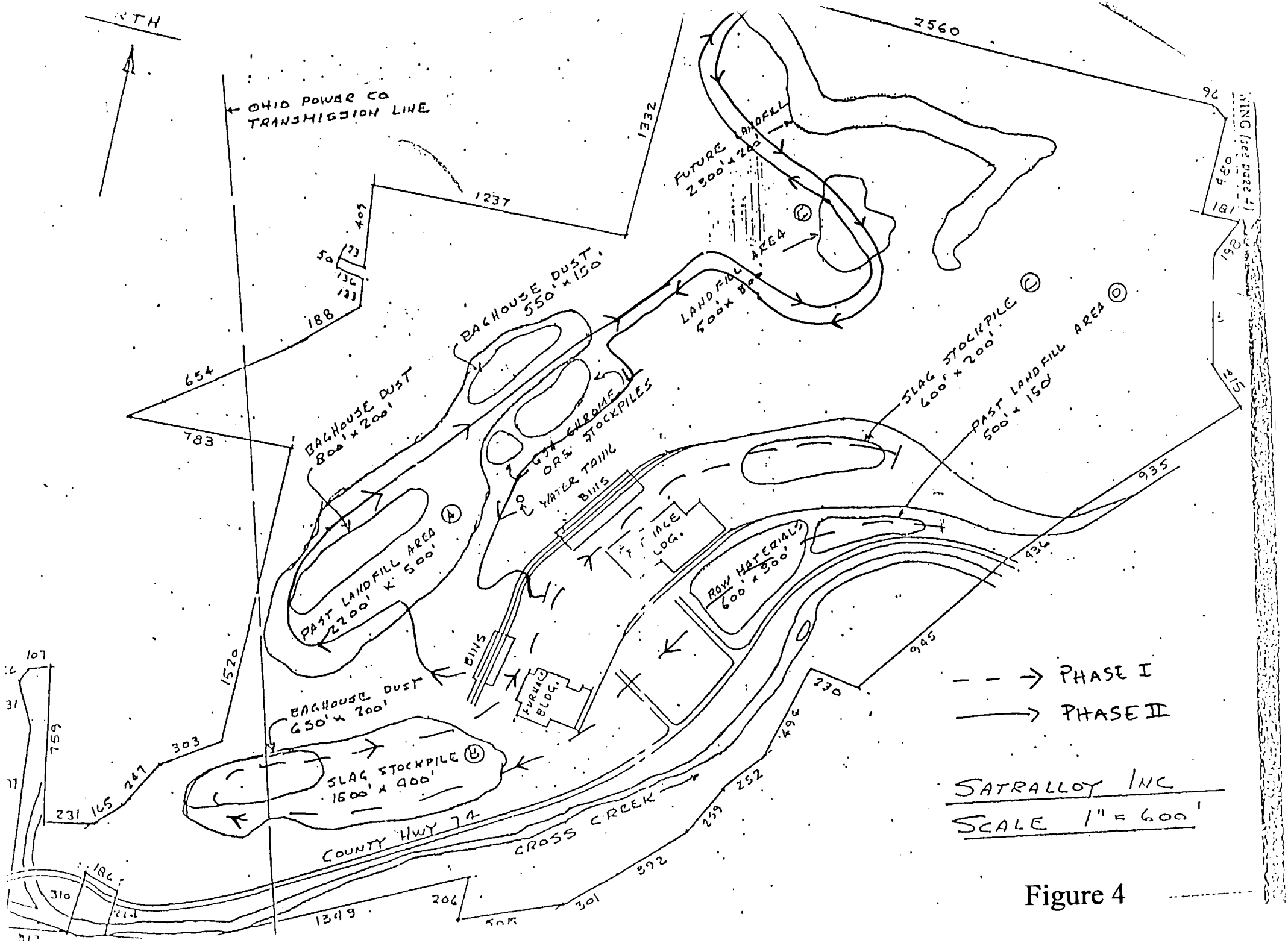

OHIO POWER CO TRANSMISSION LINE
FUTURE LANDFILL 2300' x 200'
AREA E
LANDFILL 500' x 80'
AREA D
BAGHOUSE DUST 550' x 150'
BAGHOUSE DUST 800' x 200'
BAGHOUSE DUST 650' x 200'
CaSO4 CHROME ORE STOCKPILES
WATER TANK
BINS
SLAG STOCKPILE C 600' x 200'
PAST LANDFILL AREA D 500' x 150'
PAST LANDFILL AREA A 2200' x 500'
FURNACE BLDG.
RAW MATERIALS 600' x 300'
FURNACE BLDG.
SLAG STOCKPILE B 1600' x 900'
COUNTY HWY 74
CROSS CREEK
PHASE I
PHASE II
SATRALLOY INC
SCALE 1" = 600'

Figure 4

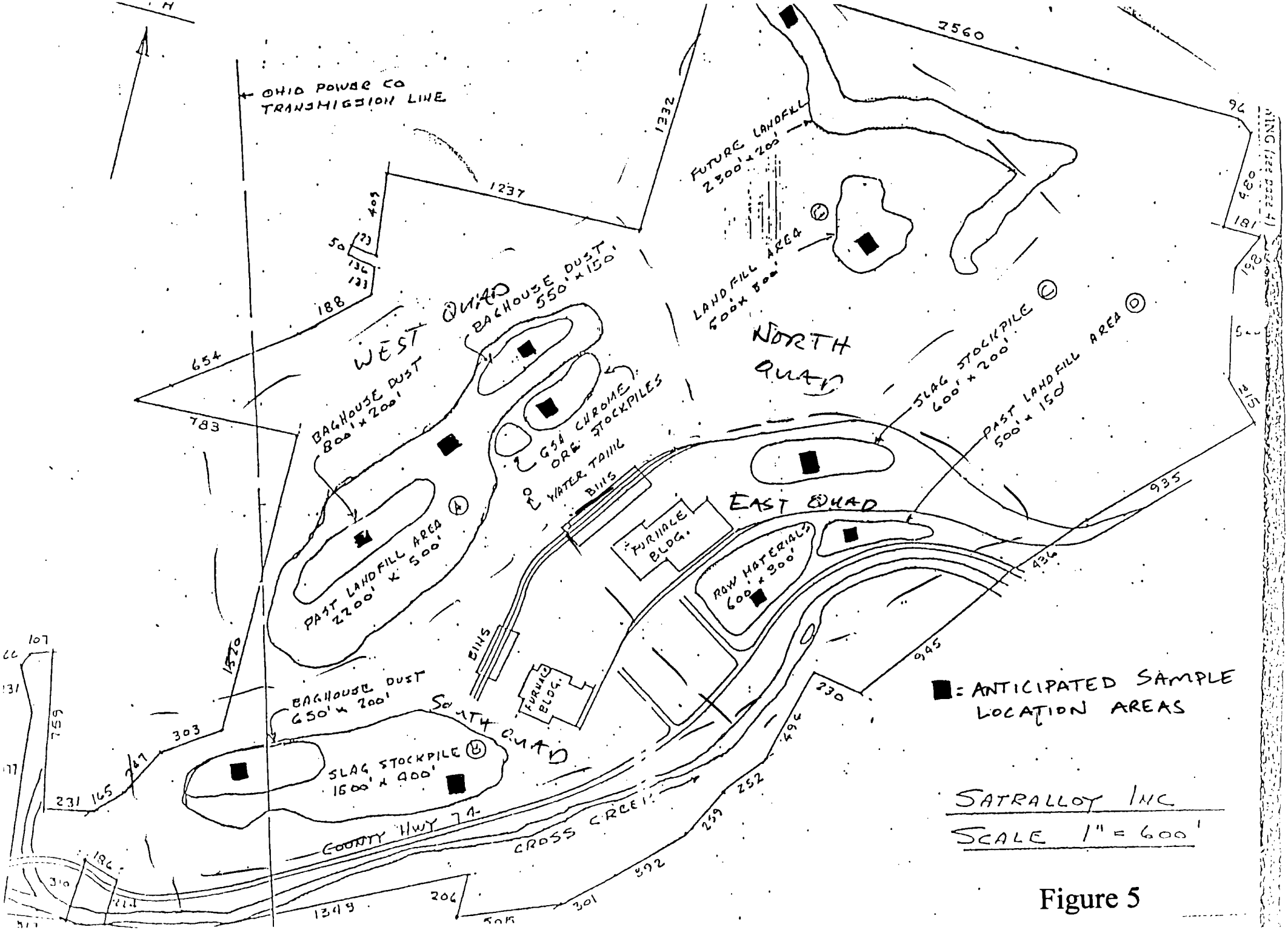

OHIO POWER CO TRANSMISSION LINE
WEST QUAD
BAGHOUSE DUST 800' x 200'
BAGHOUSE DUST 550' x 150'
G54 CHROME ORE STOCKPILES
WATER TANK
BINS
PAST LANDFILL AREA 2200' x 500'
NORTH QUAD
FUTURE LANDFILL 2300' x 200'
LANDFILL AREA 500' x 300'
SLAG STOCKPILE 600' x 200'
PAST LANDFILL AREA 500' x 150'
EAST QUAD
FURNACE BLDG.
RAW MATERIALS 600' x 300'
BAGHOUSE DUST 650' x 200'
SOUTH QUAD
SLAG STOCKPILE 1600' x 400'
COUNTY HWY 74
CROSS CREEK
■: ANTICIPATED SAMPLE LOCATION AREAS
SATRALLOY INC
SCALE 1" = 600'

Figure 5

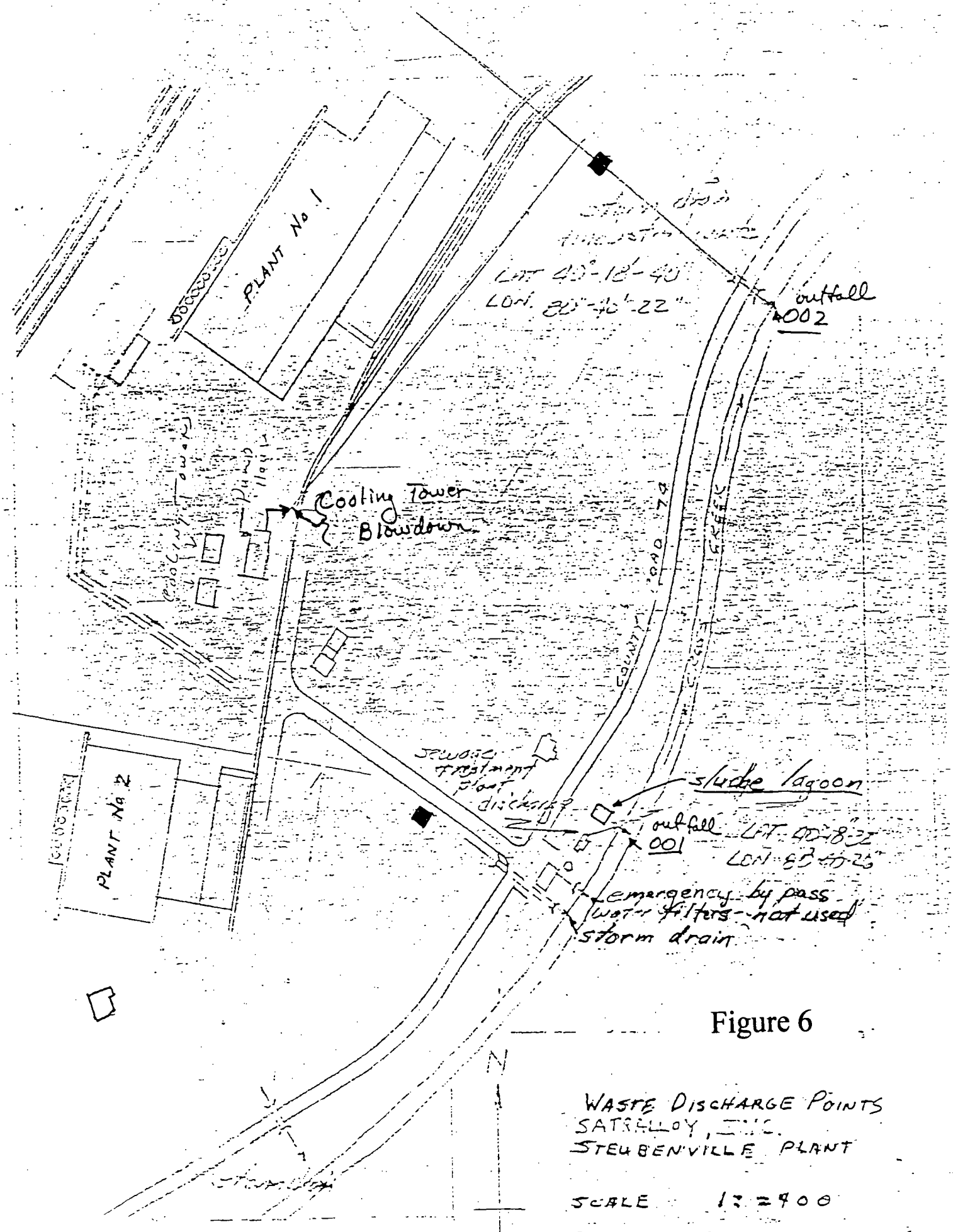


Figure 6

WASTE DISCHARGE POINTS
SATRALLOY, INC.
STEUBENVILLE PLANT

SCALE 1" = 400'

■ = POTENTIAL SAMPLE LOCATION

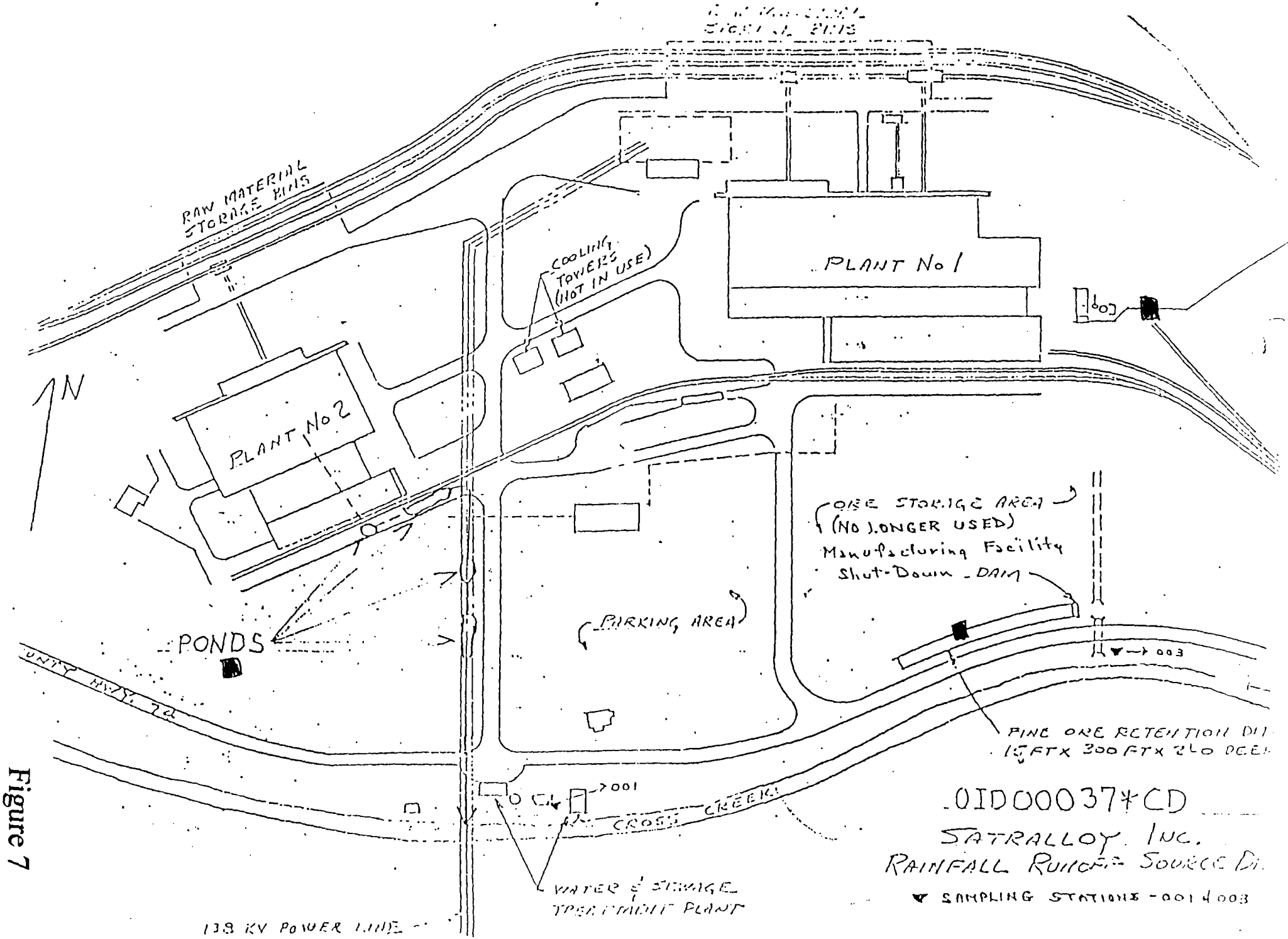

RAW MATERIAL STORAGE BINS
COOLING TOWERS (NOT IN USE)
PLANT No 1
PLANT No 2
N
PONDS
PARKING AREA
ORE STORAGE AREA (NO LONGER USED)
Manufacturing Facility Shut-Down - DAM
003
001
CROSS CREEK
WATER & STORAGE TREATMENT PLANT
138 KV POWER LINE
.OID000037*CD
SATRALLOY, INC.
RAINFALL RUNOFF SOURCE DI
SAMPLING STATIONS - 001 & 003
= ANTICIPATED SAMPLE LOCATION AREAS

Figure 7

Ohio EPA - DERR/DHWM/DSIWM
Site Safety Plan
for
Argo Sales, f.k.a.
Satralloy/Satra Concentrates
Site Inspection

May 8, 1997

Site: Jefferson Processing/Argo Sales, f.k.a. Satralloy/Satra Concentrates

U.S. EPA CERCLIS #: OHD010467538

Ohio I.D. #: 441-1068

Site Location: County Road 74
(Goulds Road)
Steubenville, OH 43952
(614) 283-3631

Prepared by: _____ **Date:** 5-8-97
Jonathan Jacobs, DERR
Rich Stewart, DHWM

Reviewed by: _____ **Date:** 5-8-97
Brian Blair, DERR Supervisor

Date(s) of Inspection: May 12, 1997

Team Members:	**Responsibilities:**
DERR:	
Jonathan Jacobs	Project Coordinator/Sample Technician
Mark Stello	Health & Safety Officer/Sample Technician
Brian Blair	Sample Technician
Olen Ackman	Sample Technician
Jason Romp	Sample Technician
DHWM:	
Rich Stewart	Project Coordinator/Sample Technician
Mike Yandrich	Sample Technician
Scott Bergreen	Health & Safety Officer/Sample Technician
Melody Stewart	Sample Technician
Randy Ohlemacher	Sample Technician
Larry Bennington	Sample Technician

DSIWM:

Bob Murphy	Project Coordinator/Inspector
Dale Warner	Inspector

Overall Site Risk/Hazard: Moderate (if dusty conditions are present); otherwise, low with potential unknown risks/hazards

Media of Possible Exposure:
Soil
Surface Water
Sediments
Waste Piles
Laboratory Chemicals

Facility Description/Site History:

Past Use: Ferrochromium production 1958-1982
Ferrochromium reclamation (from slag) 1984-1994

Present Use: Facility is not currently in use
Current owner/operator conducting salvage operations at site

Existing Activity: Misc. salvage operations

Violations: Surface water, air, solid waste, hazardous waste

Past Exposures: N/A

Site Contact and Phone Number: Catherine Glorious
NON- RESPONSIVE

Gary Smith
NON- RESPONSIVE

Grant Wilkinson, Esquire (Attorney for Jefferson Processing)
419-885-5494

Additional Info: Refer to sampling plan for complete site description, history, planned sampling activities, etc.

Map/sketch attached: yes (see sampling plan)

Levels of Personal Protection Equipment (PPE) Required: Modified Level D and/or Level C if necessary outside and in mill buildings, Level B inside abandoned laboratory.

(Modified Level D anticipated for reconnaissance and sampling; Level C may be used while sampling if determined to be necessary by air monitoring; Level B must be used inside the abandoned laboratory.)

Modified Level D: steel toe boots, hard hat (inside buildings), protective clothing.

Level C: steel toe boots, hard hat (inside buildings), protective clothing, APR with organic vapor/particulate cartridges.

Level B: steel toe boots, hard hat (inside buildings), protective clothing, SCBA.

Description of Personal Protective Equipment to be worn:

A minimum of protective clothing (tyvek suits and latex gloves) with steel-toed boots must be worn on-site in all exclusion zone areas. Nitrile or vinyl gloves, Saranex suits, and/or rubber boots may be worn if unknown materials and/or solvents are encountered or dusty conditions are present. In addition, acid gear must be worn when entering the abandoned laboratory.

Hard hats must be worn when entering buildings/structures with overhead/falling object hazards.

Latex gloves must be changed between samples to prevent cross contamination.

No smoking cigarettes, eating food or chewing gum on-site, except in designated areas. Designated areas will be determined on-site, prior to sampling. Hands and face must be washed with soap and water prior to smoking, eating, or chewing gum.

Orange safety vests will be worn in areas with hunting and traffic hazards.

Anticipated Hazards:

Chemical:	(1)	Metals (particulates in soil and waste piles; surface water runoff)
	(2)	PCBs (electrical transformers and nearby areas)
	(3)	PAHs (baghouse dust)
	(4)	Asbestos (inside buildings)
	(5)	Lab Chemicals (inside abandoned lab building - possible acids, bases, and/or reactive chemicals)
Physical:	(1)	Falling objects/overhead structures inside buildings
	(2)	Slope failure (waste piles)
	(3)	Falling/tripping

(4) Heat exhaustion (warm/hot weather)
(5) Lightning/rain
(6) High-voltage electrical (electrical transformers and associated equipment)

Hazard Control Measures:

Chemical:
(1) Personal Protection Equipment (Modified Level D and/or Level C outside and in mill buildings; Level B inside abandoned laboratory).
(2) Air monitoring for volatiles and dust. Volatiles will be monitored with a Photovac Microtip - action levels described below. Dust will be measured visually, by watching for airborne particulate clouds, especially during high winds and when sampling.
(3) No smoking cigarettes, eating food or chewing gum on-site, except in designated areas.

Physical:
(1) Wear hardhats inside buildings
(2) Use caution on slopes and inside buildings/minimize climbing activities
(3) Use buddy system at all times
(4) Use caution in rain/evacuate site if lightning is present or threatening to occur
(5) Utilize vehicles to maximum extent
(6) Bring adequate supply of water and first aid kit
(7) Use extreme caution around electrical equipment

Action/Evacuation Levels:

The action levels will be the same as stated in FSOP 1.01.

<u>For OVA/Microtip/Tip II/Hnu readings above background:</u>
1-10 ppm - Continue monitoring in Level C.
> 10 ppm - SCBA Level B, continue monitoring.

<u>For CGI readings above background:</u>
<10% LEL - Continue monitoring with caution.
10%-25% LEL - Continue monitoring with caution.
>25% LEL - Explosion hazard. Evacuate.

Monitoring Equipment/Procedures:

The Photovac Microtip/Tip II and/or Hnu will be used for safety monitoring (VOCs) based on materials encountered. The predominant site contaminants are metals; therefore, VOC monitoring need only be conducted during reconnaissance of previously unencountered or unknown materials and when entering the abandoned laboratory. Previous radiation monitoring using the ASP-1 radiation meter did not detect beta/gamma radiation at the site. Therefore, this instrument will not be utilized during this event. The MSA Combustible Gas Indicator (CGI) will be utilized when entering the abandoned laboratory. The CGI will not be utilized outside or in mill buildings, as explosive and /or oxygen hazards are not anticipated in these areas.

When sampling, readings mainly will be taken in the breathing zone, but not limited to it.

The Microtip/Tip II/Hnu will be used during reconnaissance and/or sampling, as determined on site.

Fugitive dust hazards will be evaluated qualitatively. Personal Protective Equipment will be upgraded to Level C if dust clouds are visually observed or have the potential to be generated by sampling activities.

Training:

Basic Training: Completion of the Health and Safety Training for 40-hour Hazardous Waste Operations and three days on the job training under the supervision of a qualified person pursuant to 29 CFR 1910.120 is required for all employees who will perform work in areas where the potential for a toxic exposure exists. Current eight-hour refresher course for the 40-hour course is necessary.

Respirator Fit Test: All employees performing work in areas requiring use of an air purifying respirator must hold a valid Certification of Respirator Training and Fit-Testing. Certification should be carried at all times during the site inspection.

Site Control:

Designated Work Zones: Due to the size and nature of the site, three (3) general work zones will be designated and applied during the reconnaissance and sampling activities: a Support Zone, an Exclusion Zone, and a Contamination Reduction Zone. Care must be taken when crossing zone boundaries to avoid exposure to site contaminants.

The Support Zone will include the following areas:

- Gravel parking and grassy areas near facility entrance from Gould Road;
- Gravel, dirt, and asphalt roadways;
- All general areas outside and in mill buildings, during reconnaissance activities.

The Exclusion Zone(s) will include the following areas:

- Inside abandoned laboratory building;
- All waste pile, drainage ditch, and/or surface water areas of sample collection (outside or in mill buildings).

In general, the exclusion zones will measure approximately 100 feet, unless otherwise determined by site conditions.

The Contaminant Reduction Zone(s) will be established between all exclusion and support zones prior to entering exclustion zones.

Only employees who have completed the basic training requirements may enter exclusion zones.

Designated Spokespersons: The Ohio EPA will be represented by a main Project Coordinator as well as a Site Coordinator from each Division (DERR, DHWM, and DSIWM). All correspondence between Ohio EPA and on-site representatives (and media, if present) should be directed to the appropriate Ohio EPA contact:

Project Coordinator:	Jonathan Jacobs
DERR:	Jonathan Jacobs
DHWM:	Rich Stewart
DSIWM:	Bob Murphy

Personal Decontamination Procedures: DERR FSOP 16.01 -- All personnel should wear appropriate disposable clothing and wash with soap and water. If rubber boots are worn, they should be bagged following use for off-site decontamination. All disposable personal protective equipment will be bagged on-site following use for disposal.

Equipment Decontamination Procedures: No equipment decontamination will occur on-site. All disposable sampling equipment will be bagged on-site for disposal. All non-disposable equipment will be bagged for decontamination at the SIFU Field Facility in Columbus, Ohio.

Emergency Information:

Is 9-1-1 emergency service available?	No	
Is cellular phone service available?	Yes	(Cellular phone to be kept in DERR/ DHWM vehicle)

Ambulance / Emergency Medical Service:
Ohio Valley Hospital: (614) 283-7245

Hospitals / Emergency Rooms:
Ohio Valley Hospital: (614) 283-7245
One Ross Park
Steubenville, Ohio

Poison Control Center: 1-800-682-7625

Police:	Mingo Junction:	(614) 535-1616
	Steubenville:	(614) 282-5353

Ohio State Highway Patrol: (614) 264-1641

Fire Department:	Mingo Junction:	(614) 535-1616
	Steubenville:	(614) 282-3636

Agency Safety and Health Coordinator: Beth Wolf, (614) 644-2263

DERR Safety and Health Coordinator: John Vlasko, (614) 644-3498

DHWM Safety and Health Coordinator: Wendell Wingo, (614) 644-2960

Location of Nearest Telephone (if no cellular phone):
Argo Sales office on-site or in Mingo Junction

Location of First Aid Kit: each truck, field lab, field trailer, and/or van.

Source of Potable Water: coolers and jugs in trucks and trailer.

Directions to Hospital from Site (the Good Samaritan Hospital): Ohio Valley Hospital
See attached map.

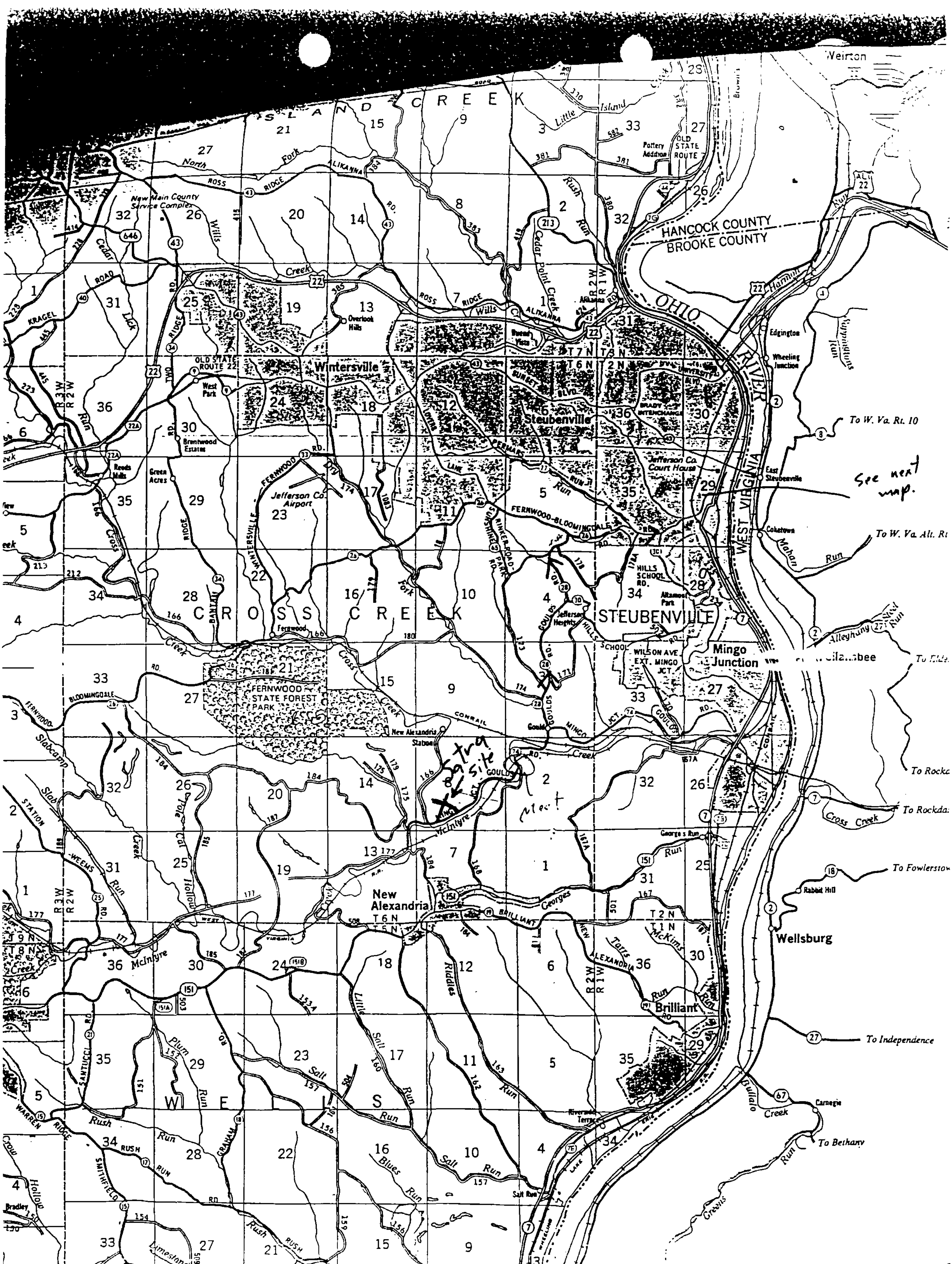
Evacuation Criteria to Consider: FSOP 1.01--Air surveillance using the Microtip PID will be the primary tool to determine if area evacuation is necessary. Evacuate areas if warranted by monitoring or conditions encountered. Also, evacuate site if lightning is present or threatening.

I have read and understand this Health and Safety Plan:

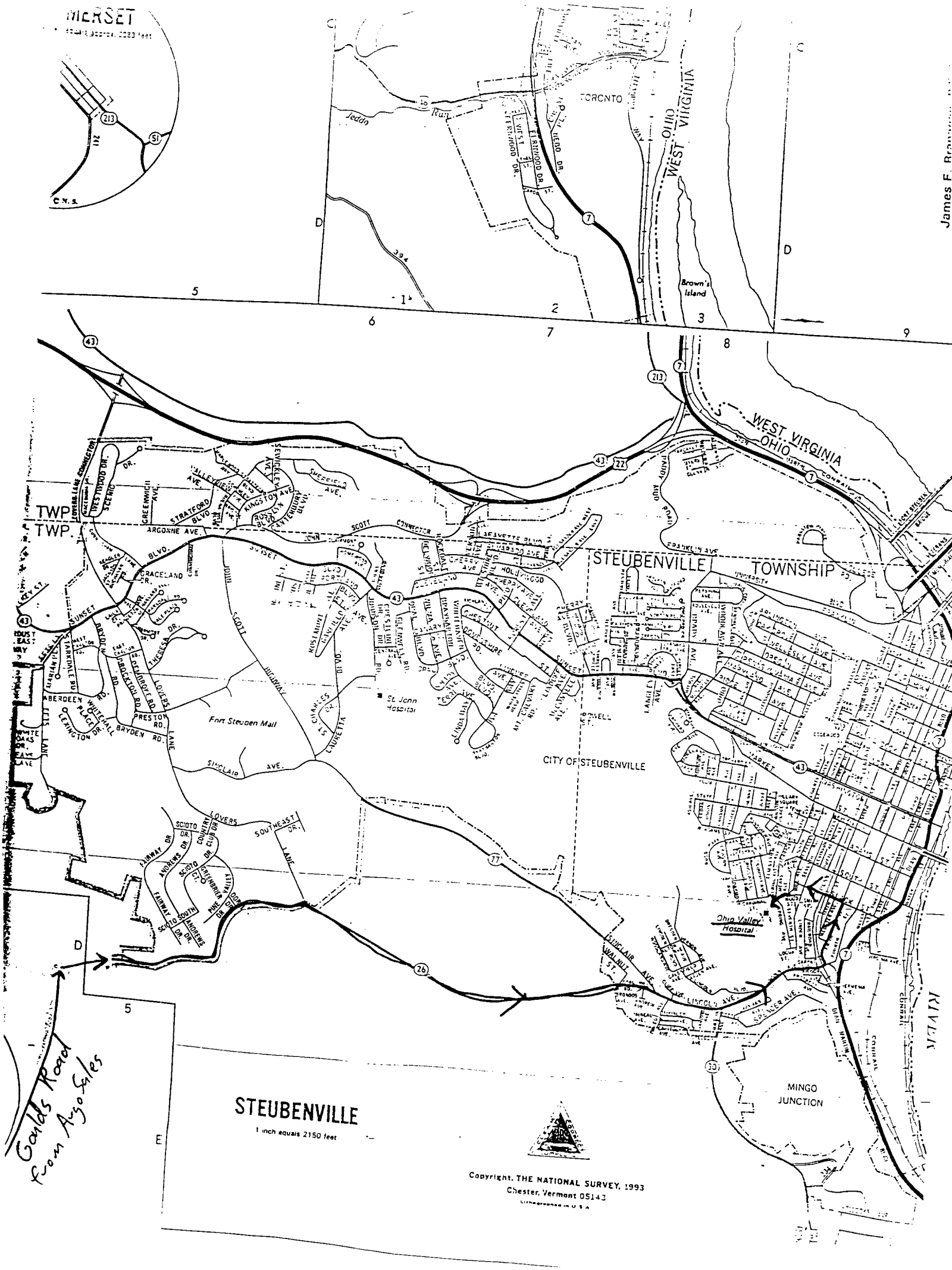
Name:	Date:
[signature]	5/12/97
[signature]	5/12/97
[signature]	5/12/97
[signature]	5/12/97
[signature]	5/12/97
[signature]	5/12/97
[signature]	5/12/97
[signature]	5/12/97
[signature]	5/12/97
[signature]	5/12/97
[signature]	5/12/97
[signature]	5/12/97
[signature]	5/12/97

I have read and understand this Health and Safety Plan:

Name:	Date:


Weirton
ISLAND CREEK
Little Island
Pottery Addition
OLD STATE ROUTE
HANCOCK COUNTY
BROOKE COUNTY
OHIO RIVER
WEST VIRGINIA
New Main County Service Complex
North Fork
ROSS RIDGE
ALIKANNA RD.
Cedar Point Creek
Rush Run
Wills Creek
Overlook Hills
Buena Vista
KRAGEL
Wintersville
OLD STATE ROUTE 22
West Park
Brentwood Estates
Reeds Mills
Green Acres
SUNSET BLVD.
Steubenville
BRADY INTERCHANGE
Jefferson Co. Court House
Jefferson Co. Airport
FERNWOOD-BLOOMINGDALE RD.
Edgington
Wheeling Junction
To W. Va. Rt. 10
East Steubenville
Coketown
To W. Va. Alt. Rt
Mahan Run
HILLS SCHOOL RD.
Altamont Park
Jefferson Heights
STEUBENVILLE
Alleghany Run
Mingo Junction
WILSON AVE EXT. MINGO JCT.
CROSS CREEK
Fernwood
FERNWOOD STATE FOREST PARK
CONRAIL
New Alexandria Station
Gould
MINGO JCT.
Slabcamp
Pole Cat Hollow Creek
McIntyre
WEEMS RD.
New Alexandria
T6N T5N
T2N T1N
BRILLIANT
Georges Run
George's Run
McKims
Tarrs Run
NEW ALEXANDRIA
To Rockdale
Cross Creek
To Fowlerstown
Rabbit Hill
Wellsburg
Brilliant
To Independence
Riddles
Little Salt Run
Salt Run
Plum Run
SANTUCCI RD.
WARREN RIDGE
Rush Run
SMITHFIELD
GRAHAM
Blues Run
Riverside Terrace
Salt Run
Buffalo Creek
Carnegie
To Bethany
Cross Creek
Bradley
Hollow
Limestone
WELLS
R3W R2W
R2W R1W
T7N T6N
See next map.
Extra site
Meet

[redacted]


MERSET
TORONTO
WEST VIRGINIA
OHIO
Brown's Island
TWP.
TWP.
STEUBENVILLE
TOWNSHIP
CITY OF STEUBENVILLE
Fort Steuben Mall
St. John Hospital
Ohio Valley Hospital
MINGO JUNCTION
STEUBENVILLE
1 inch equals 2150 feet
Gaulds Road from Argo Eyles
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